

REMARKS

This application has been carefully reviewed in light of the Office Action mailed July 13, 2005. Claims 1-31 are pending in the application. Claims 1-6, 8, 13-18, 20 and 26-31 are rejected in the application. Claims 7, 9-12, 19 and 21-25 are objected to in the application. Claims 1, 13, and 26 have been amended, and Claims 7, 11, 12, 19 and 21 have been re-written in independent form. Applicants respectfully request reconsideration and favorable action of all pending claims in view of the following remarks.

Objection to the Specification

The Office Action states the disclosure is objected to because of the informality on page 9, line 22, and requests that "the array array 10" to be changed to "array antenna 10." This change has been made as requested.

The Office Action objects to the use of the phrase "[a]n apparatus" as the preamble in Claims 1-25 and requests the preamble be changed to "[a] tapered slot antenna" because, states the Office Action, "the preamble should contain the definition of the invention." In objecting to this preamble the Office Action provides no citation or legal authority suggesting that the use of the phrase "an apparatus" as a preamble is impermissible. There is none. Although Applicants note that many Applicants customarily chose to provide more detailed language in the preamble (language that the Patent Office customarily ignores for patentability considerations) than Applicants do here, there is no requirement to do so. For these reasons Applicants respectfully traverse this objection. The objection to Claims 26-31 is traversed for analogous reasons. Reconsideration and favorable action are requested.

Allowable Subject Matter:

Applicants appreciate the Examiner's allowance of Claims 7, 9-12, 19 and 21-25 if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicants have rewritten Claims 7, 11, 12, 19 and 21 in independent form. Favorable action is requested.

Section 102 and 103 Rejections

Claims 1, 5-6, 8, 13, 17-18, 20, 26 and 30-31 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,461,392 to Mott et al. ("*Mott*"). Claims 2-4, 14-16 and 27-29 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Mott*.

Applicants respectfully traverse these rejections.

Claim 1, as amended, recites "a balun portion communicating with said first end of said slot, said balun portion having a high impedance and being configured to provide a selected degree of absorption of co-polarized electromagnetic energy," and the cited reference does not show this limitation. As described in Applicants' specification,

"a feature of the present invention is the recognition that this [transmitting as much energy received in a slot as possible through the slot to free space] also tended to limit the bandwidth of the antenna element, for example, to a maximum bandwidth of approximately one decade. Consequently, a feature of the invention is that the balun 93 in FIGURE 4 has been intentionally configured so that it absorbs a portion of the energy introduced into slot 41 by the center conductor 81 of the cable 71 [co-polarized energy]."

In contrast, the apparatus of *Mott* is directed to placing an absorber behind an antenna in order to absorb cross-polarized energy that may leak. See, e.g. Col. 2, lines 49-52. Thus, because *Mott* is concerned with absorbing cross-polarized energy, it does not disclose "a balun portion communicating with said first end of said slot, said balun portion having a high impedance and being configured to provide a selected degree of absorption of co-polarized electromagnetic energy."

For at least this reason, Claim 1 is allowable, as are all claims depending therefrom. Independent Claims 13 and 26 are allowable for analogous reasons, as are all claims depending therefrom. Reconsideration and favorable action are requested.

CONCLUSION

Applicants have now made an earnest attempt to place this case in condition for immediate allowance. For the foregoing reasons and for other apparent reasons, Applicants respectfully request allowance of all pending claims.

If the Examiner feels that prosecution of the present Application may be advanced in any way by a telephone conference, the Examiner is invited to contact the undersigned attorney at 214-953-6447.

Applicants hereby take an Extension of Time for responding to the Examiner's Office Action for one (1) month. A separate Notification of Extension of Time Under 37 C.F.R. §1.136 is hereby attached along with a check in the amount of **\$120.00** to satisfy the Extension of Time Fee calculated.

A check in the amount of **\$1,000.00** is enclosed to satisfy fees due. However, the Commissioner is hereby authorized to charge any required fees and credit any overpayments to Deposit Account No. 02-0384 of Baker Botts L.L.P.

Respectfully submitted,

BAKER BOTTS L.L.P.
Attorneys for Applicants



Charles S. Fish
Reg. No. 35,870

Date: November 14, 2005

Customer Number: **45,507**